Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-9 (canceled);

Claim 10 (previously presented): A virus formulation comprising:
a) a purified virus;
b) a buffer;
c) a sugar;
d) a salt;
e) a divalent cation;
f) a non-ionic detergent; and,
g) at least one inhibitor of free radical oxidation.

Claim 11 (original): A virus formulation of claim 10 with a concentration in the range from about 1x 10^7 vp/mL to about 1x10^{13} vp/mL and a total osmolarity in a range from about 200 mOs/L to about 800 mOs/L.

Claim 12 (currently amended): A virus formulation of claim 10 with a virus concentration in the range from about 1x 10^7 vp/mL to about 1x10^{13} vp/mL, wherein the buffer is ~~selected from a group of buffers acceptable for human parenteral use, preferably~~ a Tris buffer, at a pH from about 7.0 to about 9.0

Claim 13 (original): A virus formulation of claim 12 wherein the sugar is sucrose at a weight to volume percentage from about 2% to about 7.5% and the salt is sodium chloride from about 25 mM to about 250 mM, such that the total osmolarity of the formulation is a range from about 200 mOs/L to about 800 mOs/L.

Claim 14 (original): A virus formulation of claim 13 wherein the divalent cation is selected from the group consisting of $MgCl_2$ and $CaCl_2$ in an amount from about 0.1 mM to about 5 mM.

Claim 15 (original): A virus formulation of claim 14 wherein the non-ionic detergent is selected from the group consisting of Polysorbate-80 and Polysorbate-40 at a concentration range from about 0.001% to about 2%.

Claim 16 (previously presented): A virus formulation of claim 15 wherein the inhibitor of free radical oxidation is selected from the group consisting of ethanol, EDTA, triethanolamine, sodium citrate, histidine, and combinations thereof.

Claim 17 (currently amended): A virus formulation of claim 10 with a concentration in the range from about 1x 10^7 vp/mL to about 1x10^{13} vp/mL and a total osmolarity in a range from about 200 mOs/L to about 800 mOs/L wherein,

said buffer is about 1 mM Tris to about 10 mM Tris to provide a pH range from about pH 7.5 to about pH 8.5;

said sugar is sucrose present in a weight to volume range of about 2% to about 8%;

said salt is NaCl present in a range from about 25 mM to about 250 mM;

said divalent cation is $MgCl_2$ in a range from about 0.1 mM to about 5 mM;

said surfactant is Polysorbate-80 at a concentration from about 0.001% to about 0.25%; and

said at least one inhibitor of free radical oxidation is a combination of EDTA from about 1 μM to about 500 μM, ethanol from about 0.1% to about 5.0%, and histidine from 5 mM to 10 mM. ~~a about 5.0 mM Tris, at pH 8.0; sucrose in a weight to volume range of about 5%, NaCl at about 75 mM, $MgCl_2$ at about 1 mM to 2 mM, either Polysorbate-80 at a concentration of about 0.02% or Polysorbate-40 at a concentration of about 0.005%, EDTA is present at about 100 μM and ethanol at about 0.5%.~~

Claim 18 (currently amended): A virus formulation of claim 17, wherein ~~which comprises about 5.0 mM Tris-HCl, at pH 8.0; sucrose at about 5%, NaCl at about 75 mM, $MgCl_2$ from about 1 mM to 2 mM, Polysorbate-80 at about 0.005%,~~ EDTA is at about 100 μM and ethanol at about 0.5%.

Claim 19 (currently amended): A virus formulation of claim 11 comprising adenovirus and a formulation selected from the group consisting of formulation number A105, A110, A111, A112, A121, A126, A127, A128, A129, A130, A131, A151b, A155, A159, A160, A165, A167, A168, A169, A170, A171, A172 and A173.

Claim 20 (canceled):

Claim 21 (original): A virus formulation of claim 11 which further comprises plasmid DNA at a concentration from about 0.01 mg/mL to about 10 mg/mL.

Claim 22 (canceled):

Claim 23 (original): A virus formulation of claim 21 which comprises 5.0 mM Tris-HCl, at pH 8.0; sucrose at about 5%, NaCl at about 75 mM, $MgCl_2$ from about 1 mM to about 2 mM, Polysorbate-80 at about 0.005%, EDTA at about 100 μM, ethanol at about 0.5% and plasmid DNA at about 1 mg/mL.

Claim 24 (currently amended): An adenovirus formulation comprising a purified adenovirus and at least one inhibitor of free radical oxidation selected from the group consisting of ethanol, EDTA, triethanolamine, sodium citrate, histidine, and combinations thereof.

Claim 25 (currently amended): An adenovirus formulation of claim 24 further comprising ~~wherein a purified virus, and the inhibitor(s) of free radical oxidation further comprise~~ a buffer, a sugar, a salt, a divalent cation; and a non-ionic detergent.

Claim 26 (previously presented): An adenovirus formulation of claim 25 with an adenovirus concentration in the range from about 1x 10^7 vp/mL to about 1x10^{13} vp/ml and a total osmolarity in a range from about 200 mOs/L to about 800 mOs/L.

Claim 27 (currently amended): An adenovirus formulation of claim 26 ~~with an adenovirus concentration in the range from about 1x 10^7 vp/mL to about 1x10^{13} vp/mL~~, wherein the buffer is ~~selected from a group of buffers acceptable for human parenteral use, preferably~~ a Tris buffer, at a pH from about 7.0 to about 9.0.

Claim 28 (previously presented): An adenovirus formulation of claim 27 wherein the sugar is sucrose at a weight to volume percentage from about 2% to about 7.5% and the salt is sodium chloride from about 25 mM to about 250 mM, such that the total osmolarity of the formulation is a range from about 200 mOs/L to about 800 mOs/L.

Claim 29 (previously presented): An adenovirus formulation of claim 28 wherein the divalent cation is selected from the group consisting of $MgCl_2$ and $CaCl_2$ in an amount from about 0.1 mM to about 5 mM.

Claim 30 (previously presented): An adenovirus formulation of claim 29 wherein the non-ionic detergent is selected from the group consisting of Polysorbate-80 and Polysorbate-40 at a concentration range from about 0.001% to about 2%.

Claim 31 (currently amended): An adenovirus formulation of ~~claim 30~~ claim 24, comprising:

about 1 mM Tris to about 10 mM Tris to provide a pH range from about pH 7.5 to about pH 8.5;

sucrose in a weight to volume range of about 2% to about 8%;

NaCl in a range from about 25 mM to about 250 mM;

$MgCl_2$ in a range from about 0.1 mM to about 5 mM;

Polysorbate-80 at a concentration from about 0.001% to about 0.25%;

EDTA from about 1 μM to about 500 μM; and

ethanol from about 0.1% to about 5.0%. ~~with an adenovirus concentration in the range from about $1x\ 10^7$ vp/mL to about $1x10^{13}$ vp/mL and a total osmolarity in a range from about 200 mOs/L to about 800 mOs/L which comprises about 5.0 mM Tris, at pH 8.0; sucrose in a weight to volume range of about 5%; NaCl at about 75 mM, $MgCl_2$ at about 1 mM to 2 mM, and either Polysorbate-80 at a concentration of about 0.02% or Polysorbate-40 at a concentration of about 0.005%.~~

Claim 32 (currently amended): An adenovirus formulation of claim 31, wherein EDTA is present from about 50 μM to about 250 μM, ethanol is present from about 0.25% to about 2.0% and further comprising histidine from 5 mM to 10 mM. ~~wherein the formulation is buffered with about 5.0 mM Tris-HCl, at pH 8.0; sucrose is present a about 5%, NaCl is present at about 75 mM, $MgCl_2$ at 1 mM, and Polysorbate-80 at 0.001% with the total osmolarity approximately 310 mOs/L.~~

Claim 33 (previously presented): An adenovirus formulation of claim 25 which further comprises plasmid DNA at a concentration from about 0.01 mg/mL to about 10 mg/mL.

Claim 34 (previously presented): An adenovirus formulation of claim 26 which further comprises plasmid DNA at a concentration from about 0.01 mg/mL to about 10 mg/mL.

Claims 35-45 (canceled):

Claim 46 (previously presented): An adenovirus formulation comprising:
a) a purified adenovirus;
b) a buffer;
c) a sugar;
d) a salt;
e) a divalent cation;
f) a non-ionic detergent; and,
g) at least one inhibitor of free radical oxidation.

Claim 47 (previously presented): An adenovirus formulation of claim 46 wherein at least one inhibitor of free radical oxidation of g) is selected from the group consisting of ethanol, EDTA, triethanolamine, sodium citrate, histidine, and combinations thereof.

Claim 48 (previously presented): An adenovirus formulation of claim 46 which comprises at least two inhibitors of free radical oxidation of g) selected from the group consisting of ethanol, EDTA, triethanolamine, sodium citrate, histidine, and combinations thereof.

Claim 49 (previously presented): An adenovirus formulation of claim 47 wherein the sugar is sucrose at a weight to volume percentage from about 2% to about 7.5% and the salt is sodium chloride from about 25 mM to about 250 mM, such that the total osmolarity of the formulation is a range from about 200 mOs/L to about 800 mOs/L.

Claim 50 (previously presented): An adenovirus formulation of claim 49 wherein the divalent cation is selected from the group consisting of $MgCl_2$ and $CaCl_2$ in an amount from about 0.1 mM to about 5 mM.

Claim 51 (previously presented): An adenovirus formulation of claim 50 wherein the non-ionic detergent is selected from the group consisting of Polysorbate-80 and Polysorbate-40 at a concentration range from about 0.001% to about 2%.

Claim 52 (currently amended): An adenovirus formulation of claim 51 with a virus concentration in the range from about 1x 10^7 vp/mL to about 1x10^{13} vp/mL, wherein the buffer is ~~selected from a group of buffers acceptable for human parenteral use, preferably~~ a Tris buffer, at a pH from about 7.0 to about 9.0.

Claim 53 (currently amended): An adenovirus formulation of claim 46 comprising adenovirus and a formulation selected from the group consisting of formulation number A105, A110, A111, A112, A121, A126, A127, A128, A129, A130, A131, A151b, A155, A159, A160, A165, A167, A168, A169, A170, A171, A172 and A173.

Claim 54 (previously presented): An adenovirus formulation of claim 47 which further comprises plasmid DNA at a concentration from about 0.01 mg/mL to about 10 mg/mL.

Claim 55 (previously presented): An adenovirus formulation of claim 48 wherein the sugar is sucrose at a weight to volume percentage from about 2% to about 7.5% and the salt is sodium chloride from about 25 mM to about 250 mM, such that the total osmolarity of the formulation is a range from about 200 mOs/L to about 800 mOs/L.

Claim 56 (previously presented): An adenovirus formulation of claim 55 wherein the divalent cation is selected from the group consisting of $MgCl_2$ and $CaCl_2$ in an amount from about 0.1 mM to about 5 mM.

Claim 57 (previously presented): An adenovirus formulation of claim 56 wherein the non-ionic detergent is selected from the group consisting of Polysorbate-80 and Polysorbate-40 at a concentration range from about 0.001% to about 2%.

Claim 58 (currently amended): An adenovirus formulation of claim 57 with a virus concentration in the range from about 1x 10^7 vp/mL to about 1x10^{13} vp/mL, wherein the buffer is ~~selected from a group of buffers acceptable for human parenteral use, preferably~~ a Tris buffer, at a pH from about 7.0 to about 9.0.

Claim 59 (currently amended): An adenovirus formulation of claim 46, wherein

said purified adenovirus is present in ~~with~~ a concentration in the range from about 1x 10^7 vp/mL to about 1x10^{13} vp/mL;

the ~~and a~~ total osmolarity in a range from about 200 mOs/L to about 800 mOs/L;

said buffer is about 1 mM Tris to about 10 mM Tris to provide a pH range from about pH 7.5 to about pH 8.5;

said sugar is sucrose present in a weight to volume range of about 2% to about 8%;

said salt is NaCl is present in a range from about 25 mM to about 250 mM;

said divalent cation is $MgCl_2$ in a range from about 0.1 mM to about 5 mM;

said surfactant is Polysorbate-80 at a concentration from about 0.001% to about 0.25%; and

said at least one inhibitor of free radical oxidation is a combination of EDTA from about 1 μM to about 500 μM, ethanol from about 0.1% to about 5.0%, and, optionally, histidine ~~which comprises about 5.0 mM Tris, at pH 8.0; sucrose in a weight to volume range of about 5%, NaCl at about 75 mM, $MgCl_2$ at about 1 mM to 2 mM, either Polysorbate-80 at a concentration of about 0.02% or Polysorbate-40 at a concentration of about 0.005%, EDTA is present at about 100 μM and ethanol at about 0.5%~~.

Claim 60 (currently amended): An adenovirus formulation of claim 59, wherein EDTA is at about 100 μM, ethanol is at about 0.5% and histidine is present from 5 mM to 10 mM. ~~which comprises about 5.0 mM Tris-HCl, at pH 8.0; sucrose at about 5%, NaCl at about 75 mM, $MgCl_2$ from about 1 mM to 2 mM, Polysorbate-80 at about 0.005%, EDTA at about 100 μM and ethanol at about 0.5%~~.

Claim 61 (previously presented): An adenovirus formulation of claim 48 which further comprises plasmid DNA at a concentration from about 0.01 mg/mL to about 10 mg/mL.

Claim 62 (previously presented): An adenovirus formulation with an adenovirus concentration in the range from about 1x 10^7 vp/mL to about 1x10^{13} vp/mL and a total osmolarity in a range from about 200 mOs/L to about 800 mOs/L which comprises from about 5.0 mM to about 10 mM Tris at a pH from about 7.0 to about 9.0, sucrose at about 5% weight/volume, NaCl at about 75 mM, $MgCl_2$ from about 1 mM to 2 mM, Polysorbate-80 from

about 0.005% to about 0.1% weight/volume, EDTA at about 100 μM, ethanol at about 0.5% weight/volume, and histidine from about 5 mM to about 10 mM.

Claim 63 (previously presented): An adenovirus formulation of claim 62 wherein the Tris buffer is present at about 10 mM, sucrose at about 5% weight/volume, NaCl at about 75 mM, $MgCl_2$ at about 1 mM, Polysorbate-80 from about 0.02% weight/volume, EDTA at about 100 μM, ethanol at about 0.5% weight/volume, and histidine at about 10 mM.

Claim 64 (currently amended): An adenovirus formulation comprising a recombinant adenovirus and at least two inhibitors of free radical oxidation, wherein said inhibitors are selected from the group consisting of ethanol, EDTA, triethanolamine, sodium citrate, histidine, and combinations thereof.

Claim 65 (currently amended): An adenovirus formulation of claim 64 further comprising ~~wherein a purified virus and the inhibitors of free radical oxidation further comprise~~ a buffer, a sugar, a salt, a divalent cation; and a non-ionic detergent.

Claim 66 (previously presented): An adenovirus formulation of claim 65 wherein the sugar is sucrose at a weight to volume percentage from about 2% to about 7.5% and the salt is sodium chloride from about 25 mM to about 250 mM, such that the total osmolarity of the formulation is a range from about 200 mOs/L to about 800 mOs/L.

Claim 67 (previously presented): An adenovirus formulation of claim 66 wherein the divalent cation is selected from the group consisting of $MgCl_2$ and $CaCl_2$ in an amount from about 0.1 mM to about 5 mM and the non-ionic detergent is selected from the group consisting of Polysorbate-80 and Polysorbate-40 at a concentration range from about 0.001% to about 2%.